



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,214	11/14/2001	Erik L. Skov	044123-1607	8070

7590 11/14/2003

Bryan L. Lempia
Marshall, Gerstein & Borun
6300 Sears Tower
233 South Wacker Drive
Chicago, IL 60606-6357

EXAMINER

DAVIS, ROBERT B

ART UNIT PAPER NUMBER

1722

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,214

Applicant(s)

SKOV ET AL.

Examiner

Robert B. Davis

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 28-43 and 45-48 is/are rejected.
- 7) ☒ Claim(s) 44 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2/02,2/03
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-27, drawn to a method of molding, classified in class 264, subclass 161.
 - II. Claims 28-48, drawn to a molding apparatus, classified in class 425, subclass 289.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another and materially different apparatus, such as one where the separating apparatus is not coupled/attached to the mold cavity.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Bryan Lempia (by Examiner Fontaine of AU1732) on February 11, 2003 a provisional election was made without oral traverse to prosecute the invention of Group II, claims 28-48. Applicant in replying to this Office action must make affirmation of this election. Claims 1-27 are withdrawn from further

consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 28-30, 33, 34, 36-40 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagai (Japanese reference 60-151025: abstract and figures 1-7).

Nagai teaches a blow mold for forming a hollow article comprising: a cavity (3) configured to provide the desired shape of the article (14), a separating apparatus including cutting blades (9) of cutters (8a, 8b) which have a pinion (10) which cooperates with gears on rack (11) which is operated by motive means (12). Cutting blades (9) have a serrated edge as shown in figures 2 and 3. The blades (9) also protrude only partially into the plastic article as shown in figure 5 such that application of a force after removal of the article from the mold separates the article from the extraneous portion (see abstract – last three sentences). As shown in figure 5, the

molds include a channel in which the cutter base (8) and the rack (11) are located adjacent the cavity (3). It is clear from the drawings that the apparatus comprises first and second separating devices at each end of the cavity (3) to cut off the ends of the molded article. In regards to claim 45, the language that the second portion being configured to move with the separating apparatus is intended usage. It is suggested that applicant modify claim 45, to recite the notches of claim 44 into claim 45.

8. Claims 28, 29, 31 and 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Mehnert (3,545,040: figures 1-5; column 4, lines 45-49; column 5, lines 7-29; column 6, lines 15-56; column 7, lines 3-17; column 8, lines 41-51; and column 9, line 55 to column 10, line 2).

Mehnert teaches a blow mold for forming a hollow article comprising: a cavity configured to provide the desired shape of the article (2) or articles (figure 3), a separating apparatus including cutting blades (16) of pinions (14a, 14b) which cooperates with gears on rack (25) which is operated by motive means in the form of a piston rod of a pneumatic or hydraulic cylinder or the armature of an electromagnet (column 7, lines 10-15). Cutting blades (16) have a straight edge (17) as shown in figures 2 and 5. As shown in figure 5, the molds include a channel (12) in which the pinions (14a, 14b) are located adjacent the cavity.

9. Claims 28, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Di Settembrini (3,205,287: figures 1-5; column 1, lines 21-42; column 2, lines 37-40 and column 3, lines 1-4).

Di Settembrini teaches a mold for forming a blow molded article comprising: a cavity in mold halves (1, 2) configured to provide the desired shape of an article and a separating apparatus comprising: fluid orifices (8a, 9a) located in each of the opposed molds (1, 2: see column 3, lines 1-4) such that fluid jets from the orifices perforate the wall of the parison.

10. Claims 28, 29, 46 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Hahn (4,028,034: figures 1 and 3-8; column 3, lines 11-26 and column 4, lines 53-64).

Hahn teaches a blow molding apparatus having cavities (60, 62) in molding members (20, 22, 24, 26) and a hot wire severing means (38) that melts the blown plastic shape into two different articles (42, 42 in figure 8).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 32 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn taken together with Kato et al (5,478,229: figures 9-11 and column 7, lines 24-47).

Hahn discloses all claimed features except for the hot wire being electrically heated or a cutting member having more than one cutting surface. It is inherent that the wire can be interpreted as having more than one cutting surface.

Kato et al disclose a blow molding apparatus wherein an electric-heater cutter (70a) is used to cut an extruded parison. The cutter (70a) has cutting surfaces on the front and rear surfaces such that movement in either direction serves to cut the plastic.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Hahn by using electricity to heat the cutter as disclosed by Kato et al for the purpose of providing sufficient heat to the cutter to ensure that the cutter is of sufficient temperature to cut plastic.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Hahn by using the cutter in the forward or reverse direction as disclosed by Kato et al for the purpose of alleviating the movement of the cutter to an initial starting position such that return movement without cutting is eliminated.

14. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Nagai (Japanese reference 60-151025) or Mehnert taken together with either Struble (6,171,542) or Stoner (5,736,170).

Each of Nagai and Mehnert disclose all claimed features except for the apparatus having notches to grip the molded articles.

Struble has a mold having a notch (20) to hold plastic (F) to the mold until it is at a desired location for release.

Stoner discloses a mold having a notch (80) to hold the blown bottle against mold half (44) until it is desired to release the article by actuating pin (71).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the either primary reference with either of Struble or Stoner that teach a notch to grip a molded article for the purpose of controlling the release of the molded article from the mold.

Allowable Subject Matter

15. Claims 44 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: In regards to claim 44, none of the prior art of record teach or suggest a mold as claimed in claim 43, wherein the separating apparatus has notches for moving the severed portion with the separating device. Nagai and Mehnert disclose similar apparatus wherein a cutting member is used to severe a blown article, but neither

reference discloses or suggests the cutter having notches for ensuring relative rotation of the severed portion with the rotated cutting member.

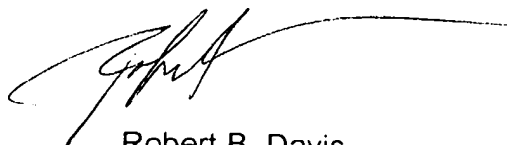
Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references show various cutters associated with blow molding devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 703-308-2625. In December, the examiner's number will change to 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Robert B. Davis
Primary Examiner
Art Unit 1722

11/10/03